

## ABSTRACT OF THE DISCLOSURE

Disclosed is a coolable housing shell for an electric machine, which is produced as a cast part, accommodates a concentric interior rotor/stator arrangement, coils, and end windings, and comprises a leadthrough that is embodied in a symmetric, concentric, and/or coaxial manner relative to an imaginary axis of rotation 5 of the machine. Said housing shell is interspersed with one or several cooling channels so as to form a coolant circuit. Also disclosed is a coating of the inner surfaces of the shell and the inner walls of the channel/s via a cathodic dipping varnish method or another dipping method.